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**ESSAYS ON INDONESIAN BANKING: COMPETITION,
EFFICIENCY, AND ITS ROLE IN MONETARY POLICY
TRANSMISSION**

Dwityapoetra Soeyasa Besar

This Thesis Is Submitted For The Degree of Doctor of Philosophy

Cass Business School, City University London

March 2011

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Acknowledgements

I would like to express my gratitude to my supervisor, Dr. Alistair Milne, for his excellent guidance and critical comments, which were crucial in completing this thesis. In particular, he reviewed many previous drafts of this work with regular encouragement and long patience. I am deeply indebted to him for many helpful comments and brilliant suggestions.

I am also thankful to my advisors Prof. Geoffrey Wood, Prof. Giovanni Urga and the member of Banking Research Center's at Cass Business School especially Prof. Shelagh Heffernan and Dr. Barbara Casu for their encouragement and guidance.

Special thanks are due to the Board of Governors of Bank Indonesia that generously supported my studies both at Columbia University during 1997-1998 and at Cass Business School, City University of London since October 2007. In particular, I would like to express my appreciation to the Governor Mr. Burhanuddin Abdullah, Deputy Governors: Dr. Muliaman D. Hadad, Mrs. Siti Ch. Fadjirjah, Mr. Budi Mulya and Dr. Halim Alamsyah for their kind support and encouragement.

I am also very grateful to some individuals in Bank Indonesia for their help in many ways. Specifically, in the Banking Sector, I would like to thank Dr. Wimboh Santoso, Dr. Agusman, Mrs. Ita Rulina and all my good friends at Financial Stability Bureau. In the Monetary Sector, I am thankful to Dr. Perry Warjiyo, and Dr. Juda Agung. In the Directorate of Human Resource, I wish to express my thanks to Mr. Gatot Sugiono, Mrs. Nita Yosita and Mr. Rudi Susetyo. In Bank Indonesia's Representative Office in London, I also would like to thank Mr. Budiman Kostaman and Mr. Dian E. Rae. The support provided by all of my friends in Bank Indonesia is also gratefully acknowledged.

I am particularly indebted to my father and my mother, who taught me that education is one of the keys to unlock the mystery of life and would like to thank my mother for her unflagging prayers and encouragement. I also take this opportunity to express my gratitude to my brothers and sisters and their family, for their help, kindness and prayers.

Very special thanks to my wife, Nila Yuliawati Soeyasa Besar and our lovely daughter, Amanda Soeyasa Besar. Without their love, support and patience I would not have accomplished, or even started this work.

Finally, I thank Allah SWT for His guidance and the opportunities provided for me.

Declaration

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Abstract

This thesis investigates competitiveness of banking market in Indonesia and monetary policy transmission during the period 2000 to 2009. As has been the case for most previous structure-performance studies, the results using the SCP specification are not very robust. When PR approach is used, as done in other studies, it reveals much evidence of imperfect competition in Indonesian provincial markets. The estimated values of H-statistics for the sample period 2001-2008 are positive ranging between 0.31 - 0.62 which is consistent with the study by Claessens and Laeven (2004). We find that the market in Java and Sumatra is more competitive than metropolitan and the periphery. H-statistic of metropolitan and the periphery are 0.31 and 0.52 respectively while Java and Sumatra is 0.62. However, the weakness of PR modeling is that it does not tell us much about the sources of imperfect competition, what can be done to change matters. The estimation using ES hypothesis specification does not also reveal significant influence of the geography of Indonesia. Although there is a modest impact of the geography of Indonesia on the level of competition, the development that help overcome geographical barriers, e.g. new banking technologies can usefully promote competition in Indonesian deposit markets.

In measuring the efficiency of the Indonesian banks, we find that the mean of cost-efficiency was in the range of 40%-50%. State-owned banks were found to be relatively more cost-efficient than foreign banks. The analysis suggests several conclusions about banking efficiency in Indonesia. Firstly, foreign ownership has positive effect on improved cost efficiency of the banks. However, the changing effect is small. Secondly, it appears that although old foreign banks are able to maintain comparable efficiency to the new acquired foreign banks, old foreign banks' efficiency tend to worsen. They need to hire more skilled workers and install better working environments. .

Finally the result of the role of banks in monetary policy in Indonesia shows that there is an operative lending channel in Indonesia. We also find evidence that large banks are more responsive, while high liquidity and high capitalization banks are less responsive to the changes in monetary policy.

Abbreviations

ARDL	autoregressive distributed lag
BI	Bank Indonesia
BPD	Bank Pembangunan Daerah (Regional/Provincial Development Bank)
BIS	Bank for International Settlements
bn	billion
BUMN	Badan Usaha Milik Negara (state owned enterprise)
CAMEL	Capital adequacy, Asset Quality, Management, Earnings, and Liquidity
CEE	Central Eastern Europe
CIA	Central Intelligence Agency's
CBI	certificate of Bank <i>Indonesia</i> (<i>Bank Indonesia's bills</i>)
CR3	concentration ratio of top three banks
DEA	data envelopment analysis
DFA	distribution free approach
DIAI	Deposit Insurance Agency of Indonesia (LPS)
ES	efficient-structure hypothesis
ESS	efficient-structure hypothesis using scale efficiency
ESX	efficient-structure hypothesis using X-efficiency
FASBI	Fasilitas Bank Indonesia (deposit facility given by Bank Indonesia for banks with excess funds).
FDH	free distribution Hull
GCG	Good Corporate Governance
GDP	gross domestic product
GMM	generalized method of moment
HHI	Herfindahl-Hirschman Index
IBA	Indonesia Banking Architecture

IBRA	Indonesian Bank Restructuring Agency (BPPN)
IMF	International Monetary Fund
IT	inflation targeting
M&As	mergers and acquisitions
MC	monopolistic competition
MENA	Middle-east and north Africa
MMDA	money-market deposit accounts
MP	market power
MSA	metropolitan statistical areas
MSME	micro small and medium enterprise
NPL	non-performing loans
NEIO	new empirical industrial organization
OMOs	open market operations
PC	perfect competition
PR	Panzar and Rosse
RMP	relative market power hypothesis
ROE	return on equity
ROA	return on assets
SAMC	State-owned Asset Management Company (PPA)
SFA	stochastic frontier approach
SCP	structure conduct performance
SME	small medium enterprises
SPP	single presence policy
TE	transition economies
TFA	thick frontier approach
US	the United States
USD	US Dollar
VAR	vector autoregressive
VRT	variable rate tender
y-o-y	year-on-year